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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,528	10/06/2003	Kazuhiro Takeda	SIC-03-036	2527
29863	7590	01/25/2006	EXAMINER	
DELAND LAW OFFICE			LEE, GUNYOUNG T	
P.O. BOX 69			ART UNIT	
KLAMATH RIVER, CA 96050-0069			PAPER NUMBER	
			2875	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/605,528		TAKEDA, KAZUHIRO	
	Examiner		Art Unit	
	Gunyoung T. Lee		2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/21/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 21, 2005 has been entered.

Amendment

2. Applicant's amendment filed on December 21, 2005 has been entered:
- Claims 1, 7 and 15 have been currently amended;
 - Claims 1-16 are still pending in this application, with claims 1, 5, 7, 9, 13 and 15 being independent.
3. The substituted drawing (Fig. 3) was received on December 21, 2005. The drawing is approved.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The claims must be given their broadest reasonable interpretation. See MPEP § 2111.

6. The functional statement that does not direct to structural limitations of an apparatus has not been given any patentable weight (see MPEP § 2114). The functional statements in the claims are not further given any patentable weight.

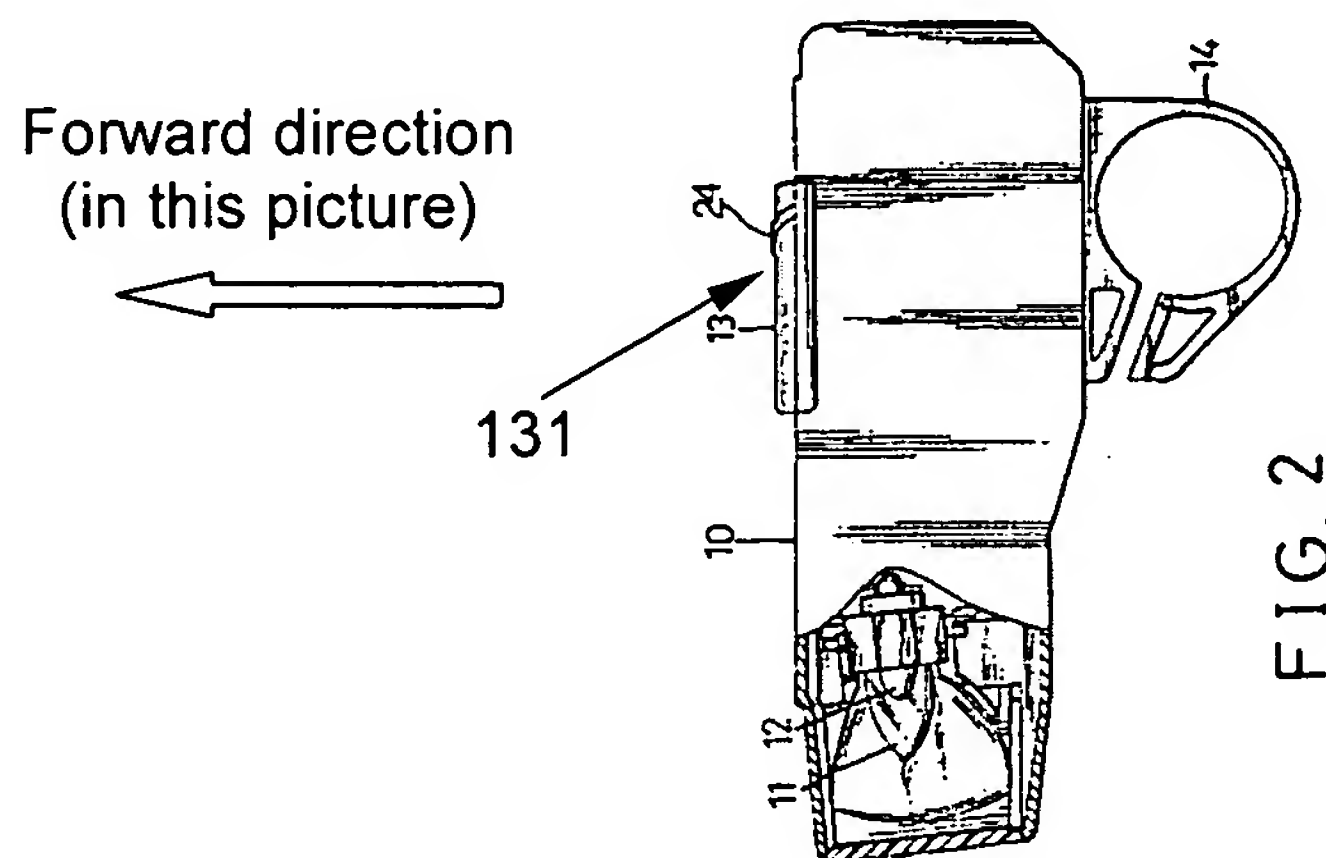
7. Claims 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (US 5,690,410).

8. Lin discloses a bicycle lighting device.

9. In regards to claim 5, Lin discloses;

- A computer housing (Fig.1, 10) adapted to be mounted to a bicycle (32);
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A display (Fig. 2, 13) housed within the computer housing (10), wherein the computer (Fig. 4, 20) controls information provided on the display (13);
- A lighting device (Fig. 3, 131) within the computer housing (10), wherein the lighting device (Fig. 4, 131) is controlled by the computer/microprocessor (20);

- Wherein a same lighting device (Fig. 4, 131) provides backlighting for the display (13) as well as lighting outside of the computer housing (10).
10. In regards to claim 6, Lin further discloses:
- Wherein the light emitted by the lighting device (Fig. 4, 131) is directed forwardly outside of the computer housing (as shown in the following picture).



Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

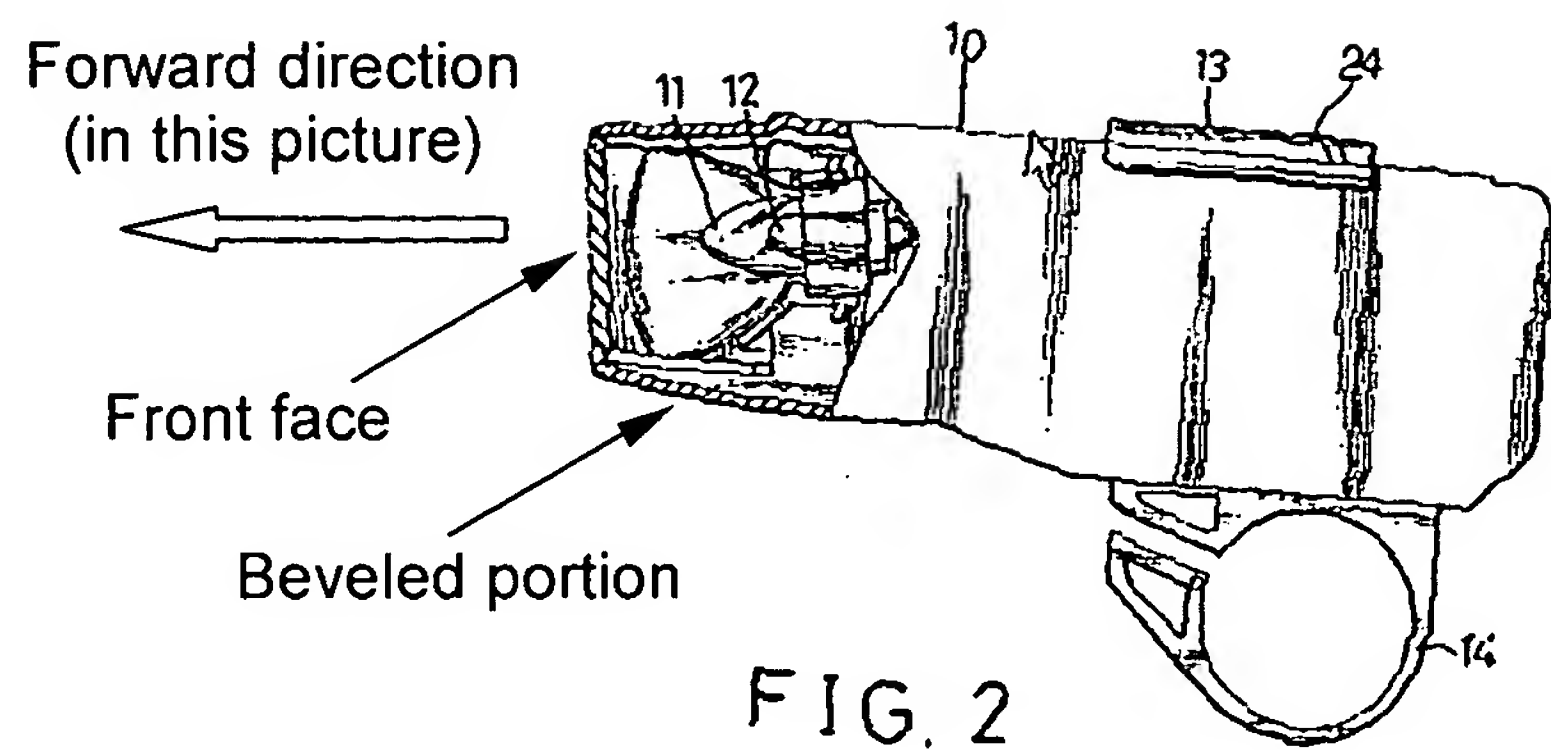
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12. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 5,690,410) in view of Lindh (US 5,029,055).

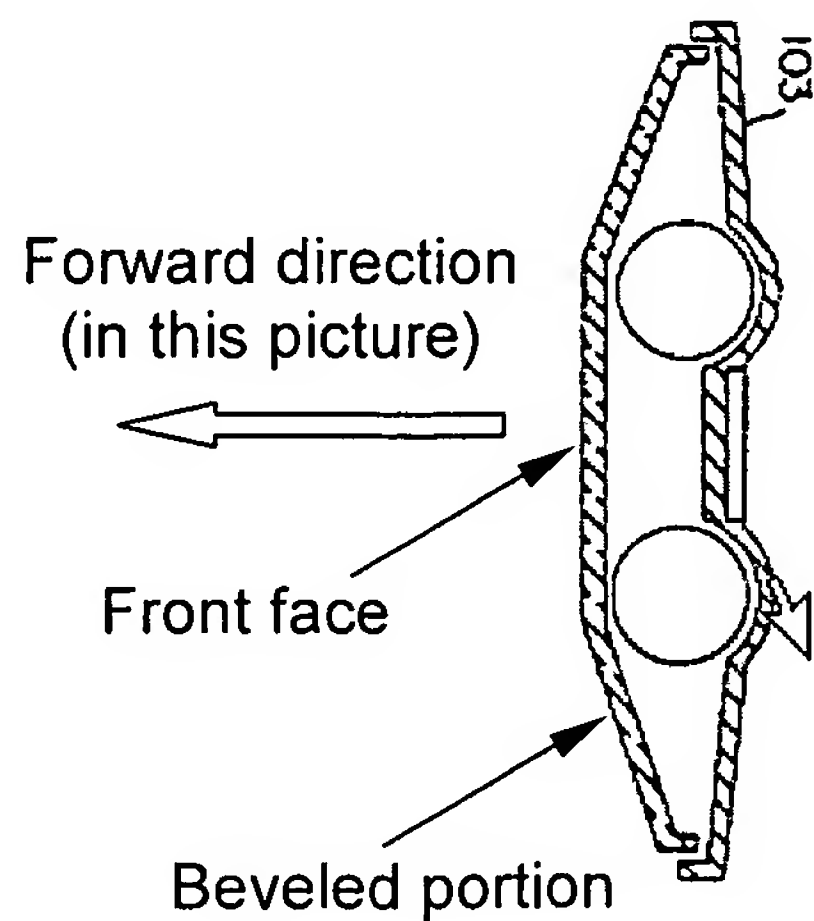
13. Lin was discussed in the rejection of claim 5 above.

14. In regards to claims 1-4, Lin discloses a bicycle lighting device having:

- A computer housing (Fig. 1, 10) adapted to be mounted to a bicycle (32);
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- Wherein the computer housing (Fig. 2, 10) includes a front surface that faces primarily forwardly and not downwardly (as shown in the picture on page 6);
- Wherein the computer housing (Fig. 2, 10) includes a downwardly beveled portion;
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A lighting device (Fig. 2, 11) housed within the computer housing (10) and controlled by the computer/microprocessor (Fig. 4, 20) (Col. 2, lines 37-42);
- Wherein the lighting device (Fig. 2, 11) is housed at the beveled portion of the computer housing (10) so that light emitted by the lighting device (11) is directed forwardly and downwardly outside of the computer housing (10);
- A display (Fig. 2, 13) housed within the computer housing (10) and inclined rearwardly;
- Wherein the beveled portion is beveled downwardly (as shown in the picture on page 6).



However, Lin does not disclose that the light emitted by a lighting device is directed through the beveled portion (claim 1). In regards to a beveled portion through which the emitted light by a lighting device passes, Lindh discloses a bicycle lamp device (Abstract, lines 7-10) having a transparent plastic cover (Fig. 1, 1) (col. 2, lines 57-58) having a front surface that faces primarily forwardly (as shown in the following picture) and a beveled portion through which the light emitted by a lighting device (Fig. 2, 2) passes inherently.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the transparent plastic cover with a beveled portion as shown in Lindh for the bicycle lighting device of Lin to provide illumination on various (near and far) areas of the bicycle. This will make it easier for the rider to identify the obstacles on the roads at various distances and thereby increases the safety of the rider.

15. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 5,690,410) in view of Kennedy et al (US 2,747,078) and Sun et al. (US 5,477,425).

16. Lin was discussed in the rejection of claims 1 and 5 above.

17. In regards to claims 7-8, Lin discloses a bicycle lighting device having:

- A computer housing (Fig.1, 10) adapted to be mounted to a bicycle (32);
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A display (Fig. 2, 13) housed within the computer housing (10) and inclined rearwardly;
- A lighting device (Fig. 2, 11) housed within the computer housing (10) and controlled by the computer/microprocessor (Fig. 4, 20) (Col. 2, lines 37-42);

However, Lin does not disclose:

- A conduit coupler disposed on the light/computer housing for coupling a conduit from an external mounted device (claim 7);

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- The light emitted by the lighting device is directed laterally outside of the computer housing (claim 7).

18. In regards to a conduit coupler, Kennedy discloses a lighting unit (Fig. 2) having a conduit coupler (74) disposed on a light housing (10) for coupling a conduit (Fig. 1, 12) from an external mounted device (11).

19. In regards to the lateral lighting, Sun et al. disclose a bicycle lighting device (Fig. 7) in which light emitted by the lighting device is directed laterally (11) outside of the lighting device (1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the conduit coupler of Kennedy and the lateral lighting as shown in Sun et al. for the bicycle lighting device of Lin in order to secure and protect the wiring between the light/computer housing and connected external devices and to provide illumination around as well as in front of the bicycle. This will increase the safety of the driver by providing sufficient illumination with a well-protected lighting system.

20. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 5,690,410) in view of Baker (US 3,792,307).

21. Lin was discussed in the rejection of claims 1, 5 and 7 above.

22. In regards to claims 9-12, Lin discloses a bicycle lighting device having:

- A computer housing (Fig.1, 10) adapted to be mounted to a bicycle (32);

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- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A display (Fig. 2, 13) housed within the computer housing (10), wherein the computer (Fig. 4, 20) controls information provided on the display (13).

However, Lin does not disclose:

- A separate battery housing spaced apart from the light/computer housing and a wiring connecting the battery housing to the light/computer housing (claim 9);
- An alternating current generator (dynamo) which provides power to the battery (claim 10).

23. In regards to a separate battery housing, a wiring connecting the battery housing to the computer housing, and an alternating current generator, Baker discloses a bicycle lighting system (Fig. 1) having:

- A separate battery housing (Fig. 1, 13) spaced apart from the light housings (11);
- A wiring (Fig. 3) connecting the battery (housing) (13) to the light housing (11);
- An alternating current generator (dynamo) (Fig. 1, 14) which provides power to the battery (Fig. 3, B) (col. 4, lines 42-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate battery housing, wiring and generator (dynamo) of Baker for the bicycle lighting device of Lin to provide the power to the computer housing either from the generator while the bicycle is traveling or from the battery when the bicycle is not in motion. This will increase the safety of the rider by providing illumination continuously regardless the motion of the bicycle, and it will also increase the service time of a power

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source (battery) by continuously recharging the power source when the lighting device is not used such as during the daytime.

24. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 5,690,410) in view of Baker (US 3,792,307).

25. Lin was discussed in the rejection of claims 1, 5, 7 and 9 above.

26. In regards to claims 13-14, Lin discloses a bicycle lighting device having:

- A computer housing (Fig.1, 10) adapted to be mounted to a bicycle (32);
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A display (Fig. 2, 13) housed within the computer housing (10), wherein the computer (Fig. 4, 20) controls information provided on the display (13).

However, Lin does not disclose:

- A separate battery housing spaced apart from the light/computer housing and a wiring connecting the battery housing to the light/computer housing (claim 13);
- A lighting device disposed outside of the battery housing (claim 13).

27. In regards to a separate battery housing, a wiring connecting the battery housing to the computer housing, and an alternating current generator, Baker discloses a bicycle lighting system (Fig. 1) having:

- A separate battery housing (Fig. 1, 13) spaced apart from the light housing (11);
- A wiring (Fig. 3) connecting the battery (housing) (13) to the light housing (11);
- A lighting device (Fig. 1, 12, 17) disposed outside of the battery housing.

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28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate battery housing, wiring and lighting device disposed outside of the battery housing as shown in Baker for the bicycle lighting device of Lin to provide additional illumination around the bicycle which also provide clear indication of a bicycle presence. This clear indication of the bicycle makes it easier for the automobile drivers to detect or identify the bicycle during evening or night hours and thereby increases the safety of the bicycle rider.

29. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 5,690,410) in view of Baker (US 3,792,307).

30. Lin was discussed in the rejection of claims 1, 5, 7, 9 and 13 above.

31. In regards to claims 15-16, Lin discloses a bicycle lighting device having:

- A computer housing (Fig.1, 10) adapted to be mounted to a bicycle (32);
- A computer/microprocessor (Fig. 4, 20) housed within the computer housing (10);
- A first lighting device (Fig. 2, 11) within the computer housing (1), wherein the lighting device (Fig. 3, 11) is controlled by the computer/microprocessor (20);
- A display (Fig. 2, 13) housed within the computer housing (10), wherein the computer (Fig. 4, 20) controls information provided on the display (13).

However, Lin does not disclose:

- A separate battery housing spaced apart from the light/computer housing (claim 15);

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- A second lighting device spaced apart from the light/computer housing (claim 15);
- An electrical wiring connecting the second lighting device to the light/computer housing and connecting the battery housing to the light/computer housing (claim 15);

32. In regards to a separate battery housing, a second lighting device and an electrical wiring, Baker discloses a bicycle lighting system (Fig. 1) having:

- A separate battery housing (Fig. 1, 13) spaced apart from the light housing (11);
- A second lighting device (Fig. 1, 12, 17) spaced apart from the light housing (11);
- An electrical wiring (Fig. 3) connecting the second lighting device (12, 17) to the light housing (11) and connecting the battery (housing) (13) to the light housing (11).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate battery housing, second lighting device and electrical wiring as shown in Baker for the bicycle lighting device of Lin to provide additional illumination around the bicycle which also provide clear indication of a bicycle presence. This clear indication of the bicycle makes it easier for the automobile drivers to detect or identify the bicycle during evening or night hours and thereby increases the safety of the bicycle rider.

Conclusion


34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blom et al. (US 5,446,628) and Tashiro (US 6,286,982) show bicycle lighting devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached between 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached at (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL
1/16/2006


JOHN ANTHONY WARD
PRIMARY EXAMINER